

STANDARDS PRESENTATION  
TO

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD,  
TITLE 8, DIVISION 1, CHAPTER 4

TITLE 8: Division 1, Chapter 4, Subchapter 14  
Petroleum Safety Orders – Drilling and Production  
Article 2. Definitions

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Amend Section 6505 as follows:

§6505. Definitions.

The following definitions shall apply in the application of these Orders.

Air intake shut-off valve. A device located between the engine air filter and the intake manifold, designed to shut off the diesel engine's combustion air in the event engine runaway occurs.

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Oil Saver. A device used in conjunction with a wire line in an oil or gas well to direct liquids and gases from such wells into desirable outlets.

Open well bore. A well open to the atmosphere during well drilling, work-over, maintenance, repair or abandonment operations.

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Pressure Vessel. A container, including cylinders, used for the storage or accumulation of any gas or liquid under pressure and as defined in the Unfired Pressure Vessel Safety Orders with the following exceptions:

- (a) Those exceptions defined in Section 451 of the Unfired Pressure Vessel Safety Orders.
- (b) Pressure vessels constructed entirely of pipe and fittings conforming to and in service as prescribed in the applicable ANSI code.
- (c) High and low pressure gas holder covered by General Order No. 94-B of the Public Utility Commission of the State of California with revised Section 4a, effective November 12, 1970.

This definition is not intended to include boilers as defined in the Boiler and Fired Pressure Vessel Safety Orders, and pressure chambers that are integral parts of such devices as pumps, motors, engines, clothes presses, flatwork ironers, tire molds, etc., where the pressure-containing part is subjected to severe ~~mechanical~~ mechanical stresses.

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Prime Mover. An engine or motor whose main function is to drive or operate other mechanical equipment.

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Rathole. A hole in the rig floor lined with a casing that projects above the floor into which the kelly and swivel are placed when hoisting operations are in progress.

Remote Control. A wired or wireless equipment control device that operates the diesel engine's air intake shut-off valve from a distance.

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Rotary Hose. (Kelly Hose). Length or section of hose between the swivel and the top of the standpipe.

Runaway. A condition affecting diesel engines, where the engine overspeeds out of control, as a result of the introduction of airborne flammable gas or vapor via the air intake causing the engine to accelerate to progressively higher and higher revolutions per minute beyond the normal operating range to a point where the engine becomes damaged due to mechanical failure.

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NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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TITLE 8: Division 1, Chapter 4, Subchapter 14  
Petroleum Safety Orders – Drilling and Production  
Article 6. Fires and Explosions

Add New Section 6625.1 as follows:

§6625.1. Diesel Engines Runaway Protection.

(a) In order to prevent diesel engine runaway as defined in Section 6505, no employer shall operate a stationary, vehicular or mobile diesel engine within 50 feet of the open well bore or other source of ignitable gas or vapor, unless the employer complies with subsection (b) through (f).

(b) The concentration of the flammable gases or vapors shall be at all times 10 percent or less of the lower explosive limit (LEL). Where concentration of the flammable gases or vapors is found to be greater than 10 percent of the LEL, the diesel engine(s) shall be shut down immediately.

(c) The air shall be continuously monitored at the well bore or at other sources of ignitable gas or vapor with an approved device to determine if a flammable atmosphere exists at concentrations greater than 10 percent of the lower explosive limit (LEL), or

(d) Where the air is not continuously monitored pursuant to subsection (c), diesel engines shall be operated under at least one of the following conditions:

(1) The diesel engine has an approved automatically actuated air intake shut-off valve that is equipped with a remote control readily accessible from the operator location or the equipment control panel where an operator is present, or

(2) The diesel engine's combustion air is provided by a duct that runs from a non-hazardous area to the air intake of the diesel engine, and the duct's air inlet is located not closer than 50 feet from the open well or other source of flammable gas or vapor, or

(3) The diesel engine has an approved automatically actuated system for injecting an inert gas into the engine's cylinders, and the system is equipped with a remote control that is readily accessible from the operator location or the equipment control panel where an operator is present, or

(4) The employer utilizes another approved method or device, as defined in Section 3206 of the General Industry Safety Orders, that is designed to automatically shut down the diesel engine effectively and stop a diesel engine runaway.

(e) The air intake shut-off valve or emergency shut-off device used to comply with this section shall be maintained and tested in accordance with manufacturer's recommendations.

(f) Diesel engines experiencing runaway conditions shall be shut down immediately, and not restarted until the area affecting the safe operation of the diesel engine is free of flammable gas or vapor.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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**TITLE 8: Division 1, Chapter 4, Subchapter 14  
Petroleum Safety Orders – Drilling and Production  
Article 46. Liquid Loading and Unloading Facilities and Operations**

Amend Section 6651 as follows:

§6651. Loading and Unloading Operations.

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(b) During the loading and unloading of a tank truck or trailer, the truck engine shall be stopped and the cab shall be unoccupied, unless the cargo is moved by means of the truck engine or an auxiliary engine with controls located in the cab, in which case the cab may be occupied by the truck operator.

(c) When a tank truck engine or an auxiliary internal combustion engine is being used to furnish power to transfer a flammable liquid, the vapors that may be liberated by such transfer shall be prevented from reaching the truck or auxiliary engine. If necessary, the vapors shall be piped to a safe location.

(d) During the loading and unloading of a tank truck or trailer, a qualified person shall be at or near the loading or unloading controls.

(e) In loading and unloading of tank cars, tank trucks or trailers, provision shall be made for the safe disposal of the liquids released by overflow or from hose spouts or lines.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.